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ABSTRACT

This report examines three aspects of funding for public higher education from 1984 to 1988. First, it compares the changes in the level of tuition at public institutions of higher education among the 50 states; second, it examines the change in state support for higher education as adjusted by the Higher Education Price Index; and, third, it combines these findings to provide an assessment of their joint impact on public higher education, and suggests some of the policy implications that arise from the findings. Major findings of the study indicated that 40 states had tuition increases at the same rate or faster than personal disposable income, and that state support for higher education decreased in 16 states and increased in 32 states. In addition, public sector tuition levels were found to have increased by 33.6 percent between 1984 and 1988, an average increase of $310 per student, while per capita personal disposable income increased $2,833 or 25.2 percent. (GLR)

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PUBLIC TUITION AND STATE EXPENDITURES FOR HIGHER EDUCATION, 1984-1988

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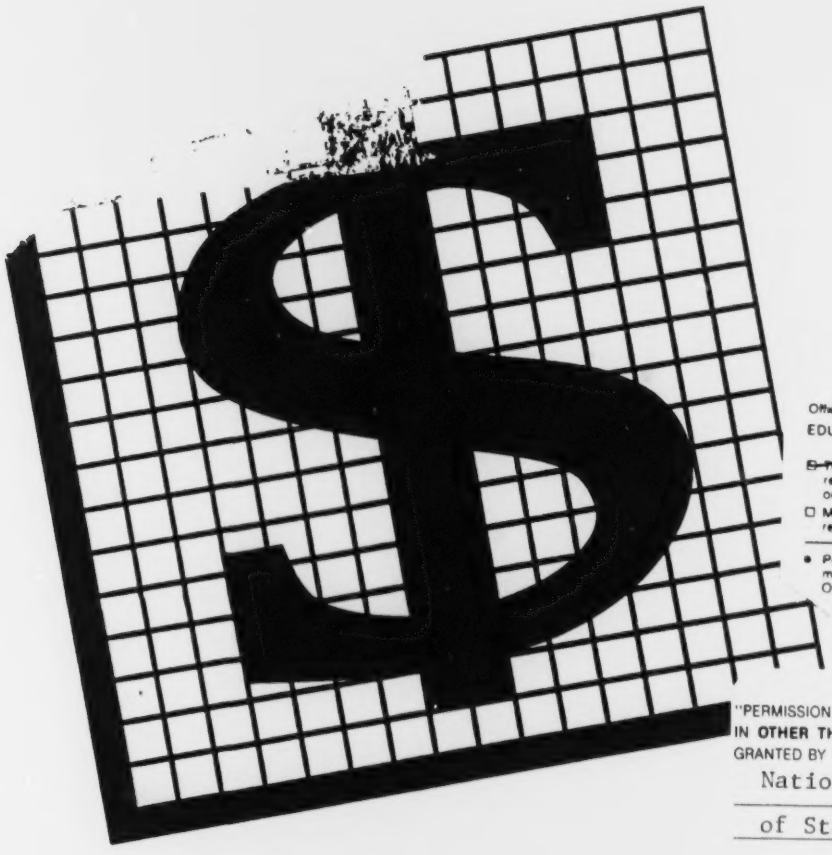

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PUBLIC TUITION AND STATE EXPENDITURES FOR HIGHER EDUCATION, 1984-1988

Legislative Finance Paper # 77

by

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EXECUTIVE SUMMARY

This report examines three aspects of funding for public higher education from 1984 to 1988. It first examines changes in the level of tuition at public institutions of higher education in the 50 states and on a state-by-state basis compares the increase to growth in personal disposable income. In 10 states tuition increased slower than disposable income. In 40 states it increased at the same rate as or faster than personal disposable income.

Second, the report examines the change in state support for higher education as adjusted by the Higher Education Price Index, a measure of inflation. The report shows that state support increased in real terms in 32 states, decreased in 16 states, and was unchanged in two.

Third, the report combines the findings of the first two sections to provide an assessment of their joint impact on public higher education and suggests some of the policy implications that arise from the findings.

INTRODUCTION

Public policymakers annually are faced with difficult decisions about setting public tuition levels and appropriating funds for support of public colleges and universities. From time to time it is beneficial to look across the 50 states to put current issues in the perspective of recent general trends. This brief overview focuses on the two major revenue sources for higher education--tuition and state support. It does not consider the many other sources of support required for a comprehensive analysis of higher education finances, for example, student financial aid, federal or foundation support, research grants and contracts, or auxiliary enterprises.

The four questions this report examines are:

1) How do changes in public sector tuition levels compare to changes in personal disposable income (PDI) for the period 1984 to 1988?

2) How do changes in state expenditures for higher education compare to changes in the Higher Education Price Index (HEPI)?

3) How has expenditure for higher education fared in comparison to changes in total state spending and changes in funding for elementary and secondary education?

4) When those changes are combined, what picture emerges of general support for higher education during the period?

The period 1984 to 1988 was chosen as the most recent period for which consistent data for the 50 states are readily available. The report compares tuition with personal disposable income because PDI is a reasonable indicator of families' ability to pay the costs of higher education. The Higher Education Price Index (HEPI) can serve as a yardstick for comparison because it measures the cost of goods and services that higher education institutions typically purchase.

THE RELATIONSHIP BETWEEN TUITION AND PERSONAL DISPOSABLE INCOME

Nationally, public sector tuition levels increased by 33.6 percent during the 1984 to 1988 period, an average increase of $310 per student. By sector, these increases were:

Community colleges--up an average of $188 or 30.7 percent;

State colleges and universities--up an average of $342 or 32.8 percent; and

State universities--up an average of $436 or 34.2 percent.

During the same period, per capita personal disposable income (PDI) increased $2,833 or 25.2 percent. (Personal disposable income is a measure of the money Americans have available for expenditures on consumption. It includes all sources of income, and then reduces that amount by all personal income taxes, state and local property taxes, social security and other insurance taxes, most licensing fees, and some other governmental exactions. Excise and sales taxes are not excluded from personal disposable income because they are related to expenditures for consumption.)

The rate at which tuition has increased is about one-third higher than the rate at which PDI has increased. Nationally, the data support the popular view that college is becoming increasingly expensive. But this supposition is not accurate for every state; individual state records vary substantially. In 24 states, tuition increased less than the national average. Eleven of these states started the period with average tuition below the national average. In 20 states, on the other hand, tuition increases were more than 10 percent above the national average. Ten of these states began the period with average tuition below the national average.

From the perspective of a family's ability to pay tuition, the combination of increases in tuition and increases in personal disposable income determines their relative change of status. If both tuition and personal disposable income increase 10 percent, a family's ability to pay remains unchanged. But if tuition, for example, increases by 42 percent and personal disposable income by 20 percent (as was the case in Iowa), families must use a greater share of their personal disposable income to meet tuition payments.

Table 1 shows the growth rate of personal disposable income and of tuition from 1984 to 1988. The column farthest to the right shows whether tuition increased at a faster or slower rate than personal income for each state. The number in that column is an index or measure of change, which is the result of dividing the percentage change in the tuition column by the percentage change in the personal income column. The purpose of the index is to show whether or not tuition increased faster than income in the period.

Thus, in New York average tuition increased by 11 percent from 1984 to 1988, while personal disposable income (PDI) increased by 29 percent in the period. The figure of .85 in the third column serves as an index of this change; it means that tuition grew only 85 percent as fast as personal disposable income in the period. For Rhode Island (in the third group of states in Table 1), tuition and PDI grew at the same rate. For Texas, the last state listed in Table 1, tuition grew at a rate 61 percent faster than PDI.

In 10 states tuition increased at a slower rate than personal disposable income--California, Florida, Maine, Massachusetts, Michigan, Nevada, New Hampshire, New York, North Carolina, and Oregon. In these states families on average found it easier to meet college costs in 1988 than in 1984. In California, Nevada, and North Carolina tuition rates in 1984 were lower than the national average, putting families in those states in a particularly favorable position.

Table 1 shows an index number between 1.00 and 1.05 for nine states--Alabama, Idaho, Indiana, Maryland, Minnesota, Ohio, Rhode Island, Vermont, and West Virginia. In these states the slight increase in tuition as a proportion of PDI indicates only a slightly greater burden for families. Alabama, Idaho, and West Virginia started the period with average tuition less than the national average.

Eighteen states have a tuition index ranging from 1.05 to 1.14, meaning that families were asked to use a somewhat higher proportion of PDI to meet college costs. Nine of these 18--Connecticut, Georgia, Illinois, Nebraska, New Jersey, Pennsylvania, South Carolina, South Dakota, and Virginia--began the period with tuition higher than the national average. The other nine--Arizona, Arkansas, Kansas, Kentucky, Missouri, New Mexico, Utah, Washington, and Wyoming--started from a base average tuition less than the national average.

The remaining 13 states, whose tuition indexes were 1.15 or greater, shifted substantial burdens onto families during the period. These states--Alaska, Colorado, Delaware, Hawaii, Iowa, Louisiana, Mississippi, Montana, North Dakota, Oklahoma, Tennessee, Texas, and Wisconsin--typically started from a lower-than-average tuition base.

Why did tuition change at such different levels in different states? One explanation might be the level of tuition at the beginning of the period. In other words, it seems reasonable to expect that in states where the rate of increase for tuition was less than the rate of increase for personal disposable income, tuition levels at the beginning of the period would be relatively high. In fact, the pattern was mixed: Of the 10 institutions with a tuition index less than 1.0, 1984 average tuition was above the national average in six and was below the national average in four.

Another possibility is that in states where the rate of tuition increase exceeded the rate of increase for personal disposable income by more than 15 percent, tuition levels at the beginning of period were relatively low. A clearer pattern emerges here: Ten of 13 states with high tuition indexes had average tuition levels below the national average of $923 in 1984. Overall neither tuition levels at the beginning of the period nor changes in income provide a clear explanation for the changing amount of personal income that goes for tuition.

Change in income did not determine the rate of increase in tuition; the correlation is statistically weak. Tuition has tended to change independently from change in income. States with low growth in income tended to see tuition rise faster in proportion to income than states whose income growth was close to the national average of 25.2 percent. Such states appear at the bottom of the table, with the extreme examples being Alaska, Louisiana, North Dakota, Oklahoma, and Texas. At the other extreme, three of the states whose index number in Column 3 is less than 1.0--Maine, Massachusetts, and New Hampshire--were the top three states in PDI growth in the period, but the other seven states with index numbers below 1.00 did not show unusual income growth.

Figure 1 on page 7 provides a picture of the relationship between tuition and personal disposable income. Of the 10 states which had a tuition to PDI ratio of less than 1.0, four are in the Northeast (Maine, Massachusetts, New Hampshire, and New York), two in the Southeast (Florida and North Carolina), and three in the West (California, Nevada, and Oregon).

Of the nine states whose tuition to PDI ratio is between 1.0 and 1.05, seven are east of the Mississippi River--Alabama, Indiana, Maryland, Ohio, Rhode Island, Vermont, and West Virginia.

In the two highest categories, in which tuition increased faster than PDI, states are clustered primarily in the central portion of the country.

In general, the map indicates a tendency for slower tuition growth in relation to PDI in the northeastern quadrant of the continental United States, and for more rapid tuition

growth in relation to PDI in the Great Plains and Mountain states. One possible explanation for this approximate regional pattern might be that the Mountain and Plains states were catching up to national levels in 1984 to 1988, after suffering the effects of recession earlier in the decade. A second factor is that personal income growth in the period tended to be higher on the Atlantic and Pacific coasts than in the middle of the country.

TABLE 1. 50 STATE COMPARISON OF TUITION AND PERSONAL DISPOSABLE INCOME, 1984-1988

State	Percentage Change Average Tuition *1984 - 1988*	Percentage Change in Personal Disposable *Income, 1984 - 1988*	Comparative Change in Share of Income Used *for Tuition*
Nevada*	-1%	25%	.79
Maine	12	33	.85
New York	11	29	.85
Massachusetts	21	36	.89
Oregon	14	23	.93
North Carolina*	28	29	.94
New Hampshire	30	36	.95
Florida*	25	28	.98
Michigan	24	26	.98
California	22	23	.99
Rhode Island	28	28	1.00
Alabama*	28	26	1.01
Ohio	25	24	1.01
Vermont	33	30	1.03
West Virginia*	28	23	1.04
Minnesota	29	24	1.04
Indiana	30	25	1.04
Idaho*	28	22	1.05
Maryland	38	31	1.05
Washington*	28	22	1.05
New Jersey	39	32	1.05
Arkansas*	33	24	1.07
Kansas*	27	19	1.07
Nebraska	29	19	1.09
Arizona*	35	23	1.10
Illinois	39	26	1.10
Connecticut	45	31	1.10
South Dakota	36	22	1.11
Kentucky*	36	22	1.12
Virginia	45	30	1.12
Wyoming*	28	14	1.13
South Carolina	43	26	1.13
Pennsylvania	45	28	1.13
Utah*	36	21	1.13
Missouri*	48	24	1.13
New Mexico*	36	28	1.14
Georgia	48	30	1.14
Colorado	34	16	1.15
Wisconsin	44	23	1.17
Mississippi*	47	25	1.18
Iowa	42	20	1.18
Montana*	43	20	1.19
Tennessee*	56	31	1.19
Delaware	59	31	1.22
Hawaii*	59	25	1.27
North Dakota*	41	10	1.28
Oklahoma*	41	9	1.29
Alaska*	58	6	1.49
Louisiana*	83	14	1.60
Texas*	86	16	1.61
United States	34%	25%	1.07

* Identifies states where average public tuition was less than average national tuition in 1984.

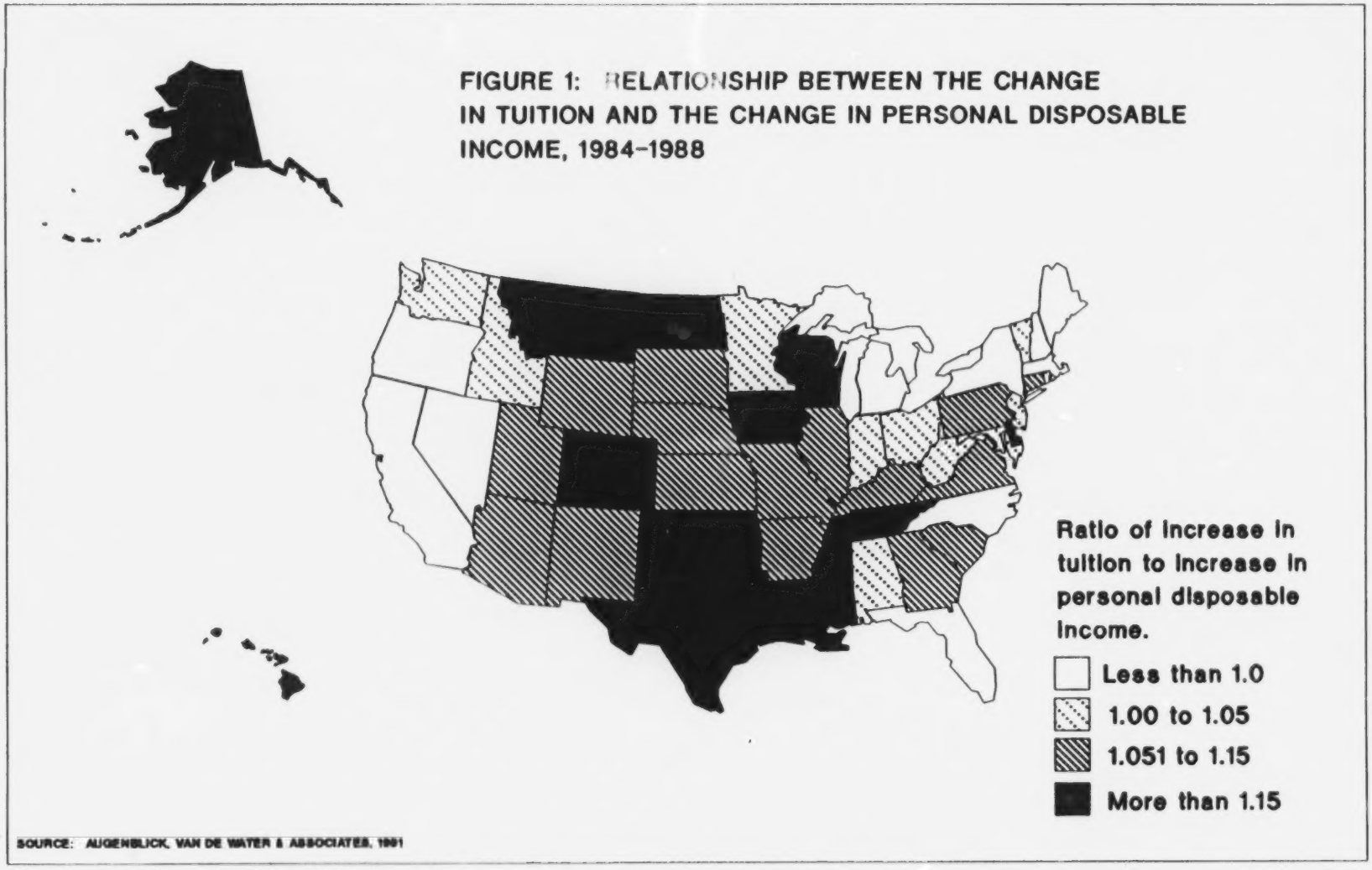
FIGURE 1: RELATIONSHIP BETWEEN THE CHANGE IN TUITION AND THE CHANGE IN PERSONAL DISPOSABLE INCOME, 1984–1988
Ratio of increase in tuition to increase in personal disposable income.
Less than 1.0
1.00 to 1.05
1.051 to 1.15
More than 1.15
SOURCE: ALGENBLICK, VAN DE WATER & ASSOCIATES, 1991

THE RELATIONSHIP BETWEEN CHANGES IN STATE SUPPORT FOR HIGHER EDUCATION AND CHANGES IN THE HIGHER EDUCATION PRICE INDEX

Nationally, state expenditures per student for higher education increased 33.2 percent during the 1984 to 1988 period. (The expenditures considered in this section are the sum of direct expenditures for higher education plus intergovernmental expenditures for higher education as defined by the Bureau of the Census in *State Government Finances* for the relevant years.) During this same period, the Higher Education Price Index (HEPI) increased 21.2 percent. The rate at which per student state spending has increased is more than 50 percent higher than the rate at which HEPI has increased.

The pattern varies greatly among the states, however. The percentage change in state spending per student varied from a reduction of 24 percent in Alaska to an increase of 71 percent in Massachusetts. Table 2 on page 10 shows the percent change in per student expenditures for higher education in terms of the change in number of dollars (the first column of figures) and the real value of the change when the Higher Education Price Index is taken into account.

The table shows that in 16 states, expenditures per student did not increase fast enough to keep up with inflation in the costs of higher education; two states kept even; and 32 states increased spending in real terms. In South Dakota, for example, expenditures per student grew by 12 percent over the period. But when inflation is taken into consideration, per student buying power fell by 7 percent.

If the 16 states with an index less than 1.0 had started from a higher than average base of expenditures, their more modest increases might be explained as bringing state expenditures more into line with those of other states. In fact, 10 of the 16 did start from a base higher than the 1984 national average of $6,352. But six states--Kansas, Montana, Nebraska, South Dakota, Wisconsin, and West Virginia--started from a lower base and, over the 1984 to 1988 period, did not increase spending as rapidly as the Higher Education Price Index increased.

At the other end of the scale, there are 16 states with an increase in per student higher education expenditures that is more than 10 percent higher than the increase in the price index. There is no specific relationship between the relatively high rate of growth in per student expenditures and the base from which the states started in 1984. Eight of these 16 states--Arizona, Arkansas, Connecticut, Indiana, Maine, North Carolina, Tennessee, and Vermont--started above the national average in 1984 and had increases greater than HEPI during the 1984 to 1988 period. The other eight started from a lower than average base.

The relationship between the change in per student expenditures for higher education and HEPI is shown in Figure 2 on page 8. The 10 states where expenditure growth was less than 95 percent of the change in HEPI are mainly Plains and Mountain states. The 17 states whose expenditure growth was within 5 percent of HEPI were also primarily Plains and Mountain states, but include Midwestern and Southern states as well. The 15 states with increases of 5 percent to 15 percent more than HEPI are primarily along the Atlantic seaboard. The nine states that increased more than 15 percent above HEPI are scattered across the country, except that none are found in the Rocky Mountain region.

TABLE 2. CHANGE IN STATE EXPENDITURES PER STUDENT FOR HIGHER EDUCATION, COMPARED TO THE HIGHER EDUCATION EXPENDITURES INDEX, 1984-1988

State	Percent Change in Expenditures per Student, 1984-1988	Percent Change Adjusted for Inflation (HEPI)
Alaska	-24%	-38%
New Mexico	-8	-24
Wyoming	-2	-19
Louisiana	5	-13
Kansas*	7	-12
Minnesota	8	-11
Wisconsin*	10	-9
Idaho	12	-8
West Virginia*	12	-7
South Dakota*	12	-7
Georgia	16	-5
Montana*	17	-4
Texas	17	-3
Colorado	17	-3
Utah	19	-2
Nebraska*	19	-2
Oklahoma	21	0
Ohio	22	0
Kentucky	22	1
Alabama	23	1
Iowa	23	2
Hawaii	24	2
North Dakota	24	3
Rhode Island	24	3
Mississippi*	24	3
Illinois*	25	3
Washington	26	4
New Hampshire	28	5
Oregon*	28	6
Delaware	32	9
Virginia	32	9
Pennsylvania*	33	9
Maryland*	33	10
South Carolina	34	10
Arizona	34	11
Vermont	35	11
Maine	37	13
Indiana	37	13
Arkansas	38	14
Florida*	38	14
New York*	38	14
North Carolina	40	15
Connecticut	44	19
Tennessee	49	23
Missouri*	50	23
Nevada*	50	24
California*	52	25
Michigan*	62	34
New Jersey*	68	39
Massachusetts*	71	41
United States	33%	9%

* Identifies states where average public tuition was less than average national tuition in 1984.

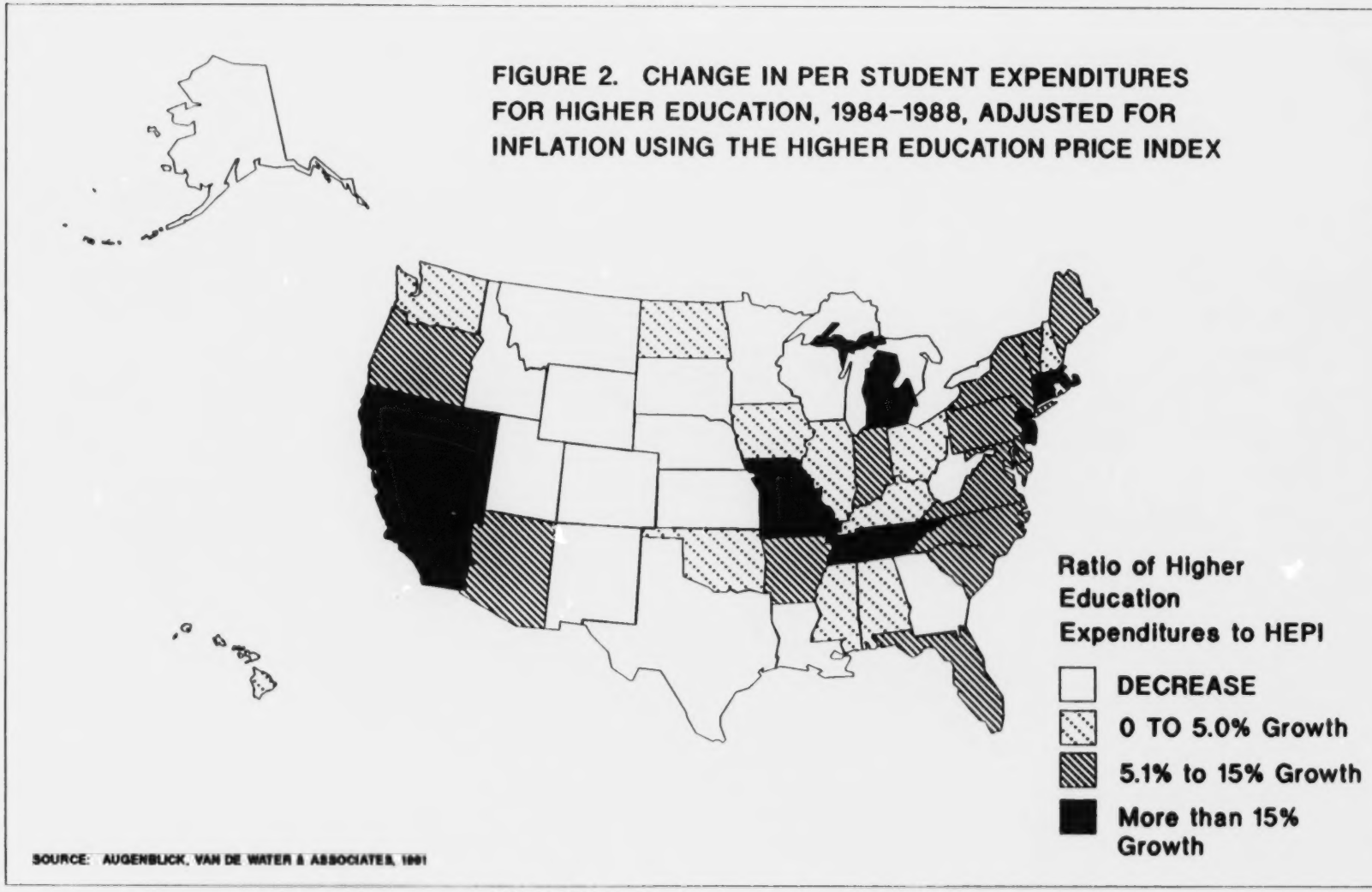
FIGURE 2. CHANGE IN PER STUDENT EXPENDITURES FOR HIGHER EDUCATION, 1984–1988, ADJUSTED FOR INFLATION USING THE HIGHER EDUCATION PRICE INDEX
Ratio of Higher Education Expenditures to HEPI
DECREASE
0 TO 5.0% Growth
5.1% to 15% Growth
More than 15% Growth
SOURCE: AUGENBLICK, VAN DE WATER & ASSOCIATES, 1991

How did higher education fare compared to total per capita state expenditures and elementary/secondary (K-12) expenditures per pupil between 1984 and 1988? Table 3 displays the data in ratio form. States are ranked according to the ratio of change in higher education expenditures per student to the change in K-12 expenditures per student. For New Mexico, for example, the table indicates in Column 4 that expenditures per student for higher education grew only .70 times as fast as expenditures per pupil in K-12. In North Dakota, the last state in the table, the ratio in Column 4 is 1.52, meaning that expenditures per student for higher education grew more than 50 percent faster than expenditures per pupil for K-12.

A ratio of less than 1.0 in Column 4 indicates that higher education did not fare as well as K-12 education during the period. This was the case in 33 states.

Table 3 also shows how well higher education expenditures per student fared in comparison to total state expenditures per capita. For example, the data for Wisconsin, the second state in the table, show that state per capita expenditures increased by 29 percent over the period (Column 1), expenditures per student in higher education grew by 10 percent (Column 2), and expenditures per pupil in elementary/secondary education increased 48 percent. In this case, K-12 expenditures fared better than state per capita expenditures in general, while higher education expenditures did not fare so well.

Nationally, total state expenditures per capita increased 35 percent and ranged from a low of 3 percent in Alaska to a high of 57 percent in Massachusetts and Florida. As might be expected, growth in higher education expenditures correlates highly with growth in total state expenditures. As a general rule, higher education expenditures during this period grew more slowly than total state expenditures. In 15 states higher education spending grew faster--Arkansas, California, Hawaii, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Nevada, New Jersey, North Carolina, North Dakota, Oregon, Tennessee, and Vermont.

From 1984 to 1988, K-12 expenditures per pupil rose 41 percent nationally, compared to higher education's 33 percent per student. In 15 states, the increase in higher education expenditures per student outpaced the increase in K-12 expenditures--Arizona, Arkansas, California, Colorado, Delaware, Massachusetts, Mississippi, Missouri, Montana, Nebraska, Nevada, New Jersey, North Dakota, Oklahoma, and Oregon. The rate of increase was the same for both areas of education spending in Pennsylvania and Tennessee. It was higher for K-12 in the remaining 33 states.

Figure 3 maps the comparative rate of growth for the two areas of education. Regional patterns appear. Eighteen of the 28 states in which the increase in K-12 expenditures per pupil was more than 5 percentage points higher than the increase in per student higher education spending are east of the Mississippi River. Eight of the 10 states in which the increase in higher education spending was more than 5 percentage points greater than that for K-12 are west of the Mississippi River.

TABLE 3. 50 STATE COMPARISON OF TOTAL STATE EXPENDITURES PER CAPITA, HIGHER EDUCATION EXPENDITURES PER STUDENT, AND K-12 EXPENDITURES PER PUPIL, 1984-1988
(States are rank ordered by the ratio in Column 4)

State	(1) Ratio of Total State Expenditures Per Capita 1988 to Total State Expenditures Per Capita in 1984	(2) Ratio of Higher Ed. Expenditures Per Student in 1988 to Higher Ed. Expenditures Per Student in 1984	(3) Ratio of K-12 Expenditures Per Pupil in 1988 to K-12 Expenditures Per Pupil in 1984	(4) Ratio of Change in Higher Ed. Expend. Per Student to Change in K-12 Expenditures Per Pupil
New Mexico	1.15	.92	1.32	.70
Wisconsin	1.29	1.10	1.48	.75
Georgia	1.35	1.16	1.53	.76
New Hampshire	1.36	1.28	1.57	.81
Wyoming	1.15	.98	1.21	.81
South Dakota	1.18	1.12	1.38	.81
Minnesota	1.22	1.08	1.29	.84
West Virginia	1.29	1.12	1.33	.84
Iowa	1.30	1.23	1.46	.85
Connecticut	1.55	1.44	1.66	.86
Kansas	1.24	1.07	1.21	.88
Maine	1.39	1.37	1.55	.88
Vermont	1.31	1.35	1.53	.88
Alabama	1.30	1.23	1.39	.89
Rhode Island	1.30	1.24	1.39	.89
New York	1.41	1.38	1.55	.89
Ohio	1.30	1.22	1.35	.90
Alaska	1.03	.76	.84	.91
North Carolina	1.39	1.40	1.54	.91
Louisiana	1.10	1.05	1.15	.91
Virginia	1.44	1.32	1.45	.91
Illinois	1.29	1.25	1.36	.92
Florida	1.57	1.38	1.50	.92
Maryland	1.31	1.33	1.42	.94
Washington	1.32	1.26	1.35	.94
Kentucky	1.29	1.22	1.30	.94
Hawaii	1.19	1.24	1.31	.94
Indiana	1.38	1.37	1.44	.95
South Carolina	1.42	1.34	1.41	.95
Utah	1.25	1.19	1.24	.96
Texas	1.28	1.17	1.22	.96
Michigan	1.32	1.62	1.68	.96
Idaho	1.25	1.12	1.15	.97
Pennsylvania	1.34	1.33	1.32	1.00
Tennessee	1.43	1.49	1.48	1.00
Mississippi	1.23	1.24	1.22	1.02
Delaware	1.37	1.32	1.28	1.03
Montana	1.24	1.17	1.13	1.03
Arkansas	1.32	1.38	1.33	1.04
Colorado	1.19	1.17	1.13	1.04
Missouri	1.37	1.50	1.41	1.06
Massachusetts	1.57	1.71	1.61	1.06
Oklahoma	1.22	1.21	1.13	1.07
Oregon	1.19	1.28	1.19	1.08
New Jersey	1.49	1.68	1.56	1.08
California	1.38	1.52	1.39	1.09
Nevada	1.36	1.50	1.35	1.11
Nebraska	1.25	1.19	1.06	1.12
Arizona	1.34	1.34	1.01	1.33
North Dakota	1.13	1.24	.82	1.52
United States	1.35	1.33	1.41	.94

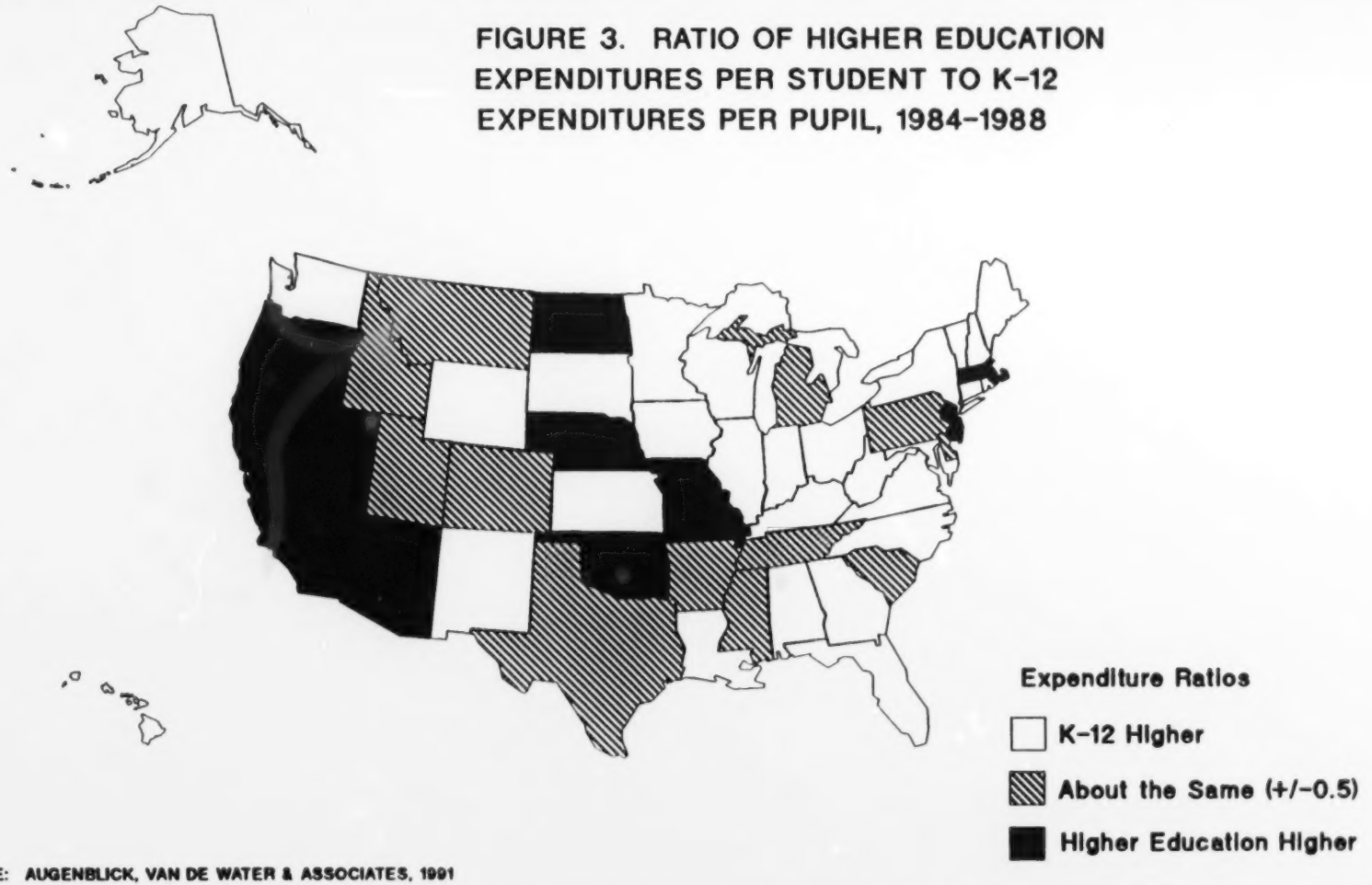
FIGURE 3. RATIO OF HIGHER EDUCATION EXPENDITURES PER STUDENT TO K-12 EXPENDITURES PER PUPIL, 1984-1988
Expenditure Ratios
K-12 Higher
About the Same (+/-0.5)
Higher Education Higher
SOURCE: AUGENBLICK, VAN DE WATER & ASSOCIATES, 1991

THE RELATIONSHIP BETWEEN TUITION AND STATE SUPPORT

As a final step, the data on tuition and state support were combined to examine the joint impact on higher education. A cross-tabulation of the states by the tuition index (tuition in relation to personal disposable income) and the per student expenditures index (expenditures related to the Higher Education Price Index) produced results shown in Tables 4 and 4A through 4G.

Table 4 provides the number of states with a particular relationship between the rate of increase in tuition and the rate of increase in higher education expenditures in the period.

The upper left cell, A-1, holds a zero, indicating that no states simultaneously had low tuition increases and low increases in the higher education expenditures index. The lowest right-hand cell, C-3, holds the figure *10*, indicating that 10 states simultaneously ranked high on both indices.

Tables 4A through 4G identify and examine the states that are included in each cell in Table 4.

Starting in the upper left hand cell of Table 4 (cell A-1), we see first that there are no states where both the tuition index and the higher education expenditures index are low. This cell represents the worst combination of conditions that colleges and universities might experience. The following tables, 4A through 4G, each refer to the states in one cell of Table 4. Because cells A-1 and A-2 in Table 4 include no states, there are no tables below to refer to those cells.

Table 4A includes the states in cell B-1 in Table 4. In these states tuition is increasing at about the same pace as personal disposable income and state support is lagging behind the Higher Education Price Index. In these states one would expect to find slightly deteriorating conditions at state colleges and universities. These conditions would typically include few new program offerings, lagging salary levels, and some deferred maintenance.

The states shown in cell C-1 of Table 4 appear in Table 4B. They increased tuition faster than the increase in personal disposable income while increasing state support at a rate lower than the rate of increase for HEPI. These states appear to be asking families to increase their share of the cost of higher education. On balance, public colleges and universities in these states are likely to be experiencing reasonably stable conditions, although increases in tuition levels may be adversely affecting enrollment.

TABLE 4. RELATIONSHIP BETWEEN TUITION AND STATE SUPPORT

		Tuition Index		
		(A) LOW Less than .95 (Number of States)	(B) MEDIUM .95 - 1.05 (Number of States)	(C) HIGH More than 1.05 (Number of States)
Higher Education Expenditures Index	(1) Low Less than .95	0	3	7
	(2) Medium O.95 - 1.05	0	3	4
	(3) High More than 1.05	6	7	10

TABLE 4A. GROUP B-1

Tuition Index = Medium; Higher Ed. Expend. Index = Low

STATE	TUITION INDEX	HIGHER EDUCATION EXPENDITURES INDEX
Idaho	1.05	.92
Minnesota	1.04	.89
West Virginia	1.04	.93

TABLE 4B. GROUP C-1

Tuition Index = High; Higher Ed. Expend. Index = Low

STATE	TUITION INDEX	HIGHER EDUCATION EXPENDITURES INDEX
Alaska	1.49	.62
Kansas	1.07	.88
Louisiana	1.60	.87
New Mexico	1.14	.76
South Dakota	1.11	.93
Wisconsin	1.17	.91
Wyoming	1.13	.81

Colleges and universities in the three states listed in Table 4C are experiencing stability. Any new program initiatives are likely to be made only if existing programs are eliminated. Faculty salaries are, at best, keeping pace with inflation.

Colleges and universities in Group A-3 (Table 4D) are also fairly stable financially since the high increases in state support offset the low tuition levels.

States in Group B-3 (Table 4E) have increased tuition at about the same rate as the increase in personal disposable income, while state support has increased at a rate above that of the Higher Education Price Index. Colleges and universities in these states were somewhat better off in 1988 than in 1984 due to state support increasing at a faster rate than the rise in the price of goods and services.

TABLE 4C. GROUP B-2

Tuition Index = Medium; Higher Ed. Expend. Index = Medium

STATE	TUITION INDEX	HIGHER EDUCATION EXPENDITURES INDEX
Alabama	1.01	1.01
Ohio	1.01	1.00
Rhode Island	1.00	1.03

TABLE 4D. GROUP A-3

Tuition Index = Low; Higher Ed. Expend. Index = High

STATE	TUITION INDEX	HIGHER EDUCATION EXPENDITURES INDEX
Maine	.85	1.13
Massachusetts	.89	1.41
Nevada	.79	1.24
New York	.85	1.14
North Carolina	.94	1.15
Oregon	.93	1.06

TABLE 4E. GROUP B-3

Tuition Index = Medium; Higher Ed. Expend. Index = High

STATE	TUITION INDEX	HIGHER EDUCATION EXPENDITURES INDEX
California	.99	1.25
Florida	.98	1.14
Indiana	1.04	1.13
Maryland	1.05	1.10
Michigan	.98	1.34
New Hampshire	.95	1.05
Vermont	1.03	1.11

The 14 states in Group C-2 (Table 4F) have increased tuition at a higher rate than the increase in personal disposable income and have increased state support at about the same rate as the increase in HEPI. While colleges and universities in these states appear to be somewhat better off in terms of revenues, the rapid rise in tuition rates may be limiting access for residents unless significant efforts have been made to extend student financial assistance programs.

The 10 states in Group C-3 (Table 4G) are high in both dimensions. From a revenue perspective, public institutions of higher education in these states appear to be doing very well. One would expect to find conditions improving at colleges and universities in these states, including the addition of new programs, increases in faculty salaries, and well-kept facilities. As accountability issues become increasingly important, it is likely that these states will be early candidates for examination due to their steady increases in both tuition and state support.

Figure 4 shows the states as categorized by the groupings just discussed.

TABLE 4F. GROUP C-2

Tuition Index = High; Higher Ed. Expend. Index = Medium

STATE	TUITION INDEX	HIGHER EDUCATION EXPENDITURES INDEX
Colorado	1.15	.97
Georgia	1.14	.95
Hawaii	1.27	1.02
Illinois	1.10	1.03
Iowa	1.18	1.02
Kentucky	1.12	1.01
Mississippi	1.18	1.03
Montana	1.19	.96
Nebraska	1.09	.98
North Dakota	1.28	1.03
Oklahoma	1.29	1.00
Texas	1.61	.97
Utah	1.13	.98
Washington	1.05	1.04

Table 4G. Group C-3

Tuition Index = High; Higher Ed. Expend. Index = High

STATE	TUITION INDEX	HIGHER EDUCATION EXPENDITURES INDEX
Arizona	1.10	1.11
Arkansas	1.07	1.14
Connecticut	1.10	1.19
Delaware	1.22	1.09
Missouri	1.13	1.23
New Jersey	1.05	1.39
Pennsylvania	1.13	1.09
South Carolina	1.13	1.10
Tennessee	1.19	1.23
Virginia	1.12	1.09

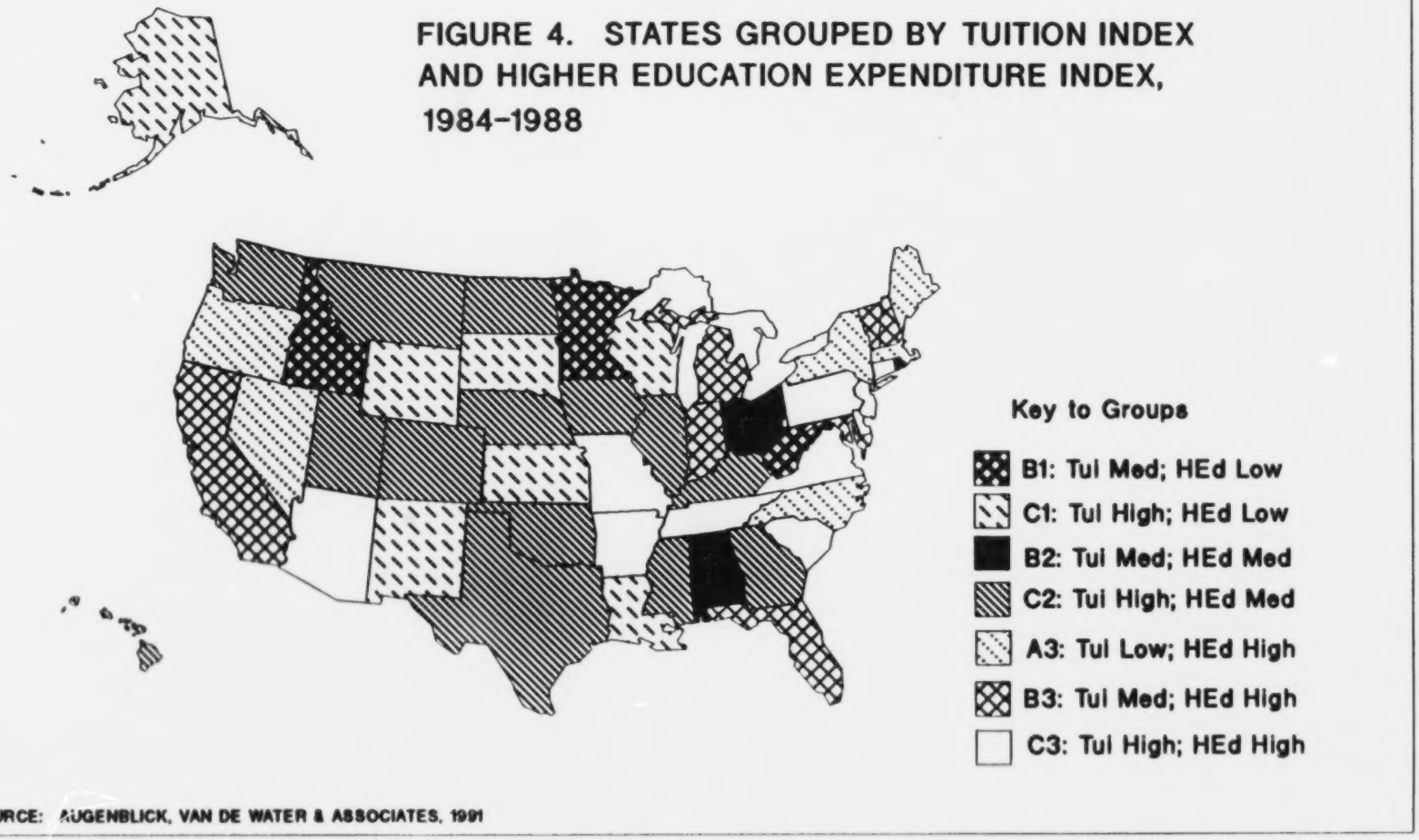
FIGURE 4. STATES GROUPED BY TUITION INDEX AND HIGHER EDUCATION EXPENDITURE INDEX, 1984-1988
Key to Groups
B1: Tui Med; HEd Low
C1: Tui High; HEd Low
B2: Tui Med; HEd Med
C2: Tui High; HEd Med
A3: Tui Low; HEd High
B3: Tui Med; HEd High
C3: Tui High; HEd High
SOURCE: AUGENBLICK, VAN DE WATER & ASSOCIATES, 1991

SUMMARY

Our examination of the rate of change in tuition relative to the rate of change in personal disposable income shows that:

- In 40 states, the rate of increase in tuition has exceeded the rate of increase in personal disposable income.
- Six of 10 states with low rates of tuition increase started the period with tuition levels above the national average.
- States with high rates of tuition increase started the period with tuition levels above the national average.

Our examination of the change in per student state expenditures relative to the change in the Higher Education Price Index shows that:

- State expenditures per student increased 33.2 percent between 1984 and 1988, a rate 50 percent higher than the rate of increase of the Higher Education Price Index.
- In 16 states, the rate of increase in state expenditures per student did not keep pace with the rate of increase of the Higher Education Price Index.
  - Six of these states started the period with expenditure levels below the national average.
- In 18 states, the rate of increase in expenditures per student exceeded the rate of increase in the Higher Education Price Index by 10 percent or more.
  - Eight of these states started from a higher than average level of expenditures in 1984

Looking at tuition and state expenditures together, it is clear that patterns vary widely. While no states emerged as both low on the tuition index and low on the higher education expenditures index, 16 states were low on one index or the other. At the other extreme, 10 states, listed in Table 4G (Group C-3) stand out as providing above average support for public institutions of higher education on both indices.

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January 2, 1991

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NCSL RELEASES HIGHER EDUCATION REPORT

The National Conference of State Legislatures (NCSL) has issued the report, *Public Tuition and State Expenditures for Higher Education, 1984-1988*. The report looks at the change in tuition levels relative to the change in personal disposable income. It also examines the change in state expenditures per student compared to the change in the Higher Education Price Index.

Major findings of the study are as follows:

- In 40 states tuition increased at the same rate as or faster than personal disposable income.
- State support for higher education, as adjusted by the Higher Education Price Index, decreased in 16 states and increased in 32 states.
- Public sector tuition levels increased by 33.6 percent between 1984 and 1988, an average increase of $310 per student.
- During this same period, per capita personal disposable income increased $2,833 or 25.2 percent.

Public Tuition and State Expenditures for Higher Education, 1984-1988, can be purchased for $15 (plus an additional $1.50 for shipping and handling) from the NCSL Book Order Department, 1560 Broadway, Suite 700, Denver, Colorado 80202. Phone (303) 830-2054. American Express, MasterCard, and Visa accepted.

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